

# International Conference on Agents and Multi-Agent Systems: Technologies and Applications (KES-AMSTA-17)



KES AMSTA 2017, Tivoli Marina Hotel,  
Vilamoura, Algarve, Portugal  
21-23 June 2017

**IS06 - Invited Session:**

**LP:ABA - Learning Paradigms and Applications: Agent-based Approach**

<http://amsta-17.kesinternational.org/cms/userfiles/is06.pdf>



## General Information

Software agents are defined as computer systems situated in an environment and that are able to achieve their objectives by: (i) acting autonomously, i.e. by deciding themselves what to do, and (ii) being sociable, i.e. by interacting with other software agents. Research interests in agent systems are spanning various topics like modeling, design and development of advanced software systems that are appealing for a number of computer applications.

E-learning represents a collection of e-services that employ digital media and ICT for supporting educational processes. E-learning is interdisciplinary area, encompassing many aspects of the educational technologies that cover instruction, training, teaching, learning, pedagogy, communication and collaboration.

During the last decade, agent technologies were proposed to enhance e-learning systems across at least two dimensions: (i) agents as a modeling and design paradigm for advanced human-computer interaction and (ii) agents for smart functional decomposition of complex systems.

Firstly, agents have been described as entities that exhibit several interesting properties that are very appealing for the modeling and design of advanced user interfaces encountered in e-learning systems: teachers, tutors and students.

Secondly, generic agent types proven to be effective for the appropriate functional decomposition of e-learning systems. Dynamic and interoperability characteristics of agents are very suitable for supporting maintainability and extensibility of e-learning systems.

Last but not least, yet another facet of agent-based approaches for e-learning is brought by the application of intelligent agent technologies in educational settings. Agents are often seen as incarnations of various forms of artificial intelligence including machine learning, reasoning and data mining.

We do believe that e-learning and software agents are orthogonal technologies and their integration is beneficial for designing better e-learning systems.

## Topics

Submissions are expected from, but not limited to the following topics:

- Modeling and application in educational domains of various types of adaptation and personalization.
- Personal agents that support users during their activities of educational processes.

- Specialized task agents for harvesting and composition of e-learning resources according to the teaching, as well as learning needs.
- Middle-agents, brokers and recommenders as mediation between the user preferences and resource capabilities, according to different criteria (the knowledge level of the student or the educational domain of the course).
- Pedagogical, emotional and affective agents and their influence on e-learning processes.
- Machine learning and data mining in e-learning systems: advanced facilities like understanding students behavior, learning user preferences, or semantic matching between student profiles and educational resources.
- Collaboration and student teamwork in e-learning.
- Agent-based educational project management.
- Agent-based e-learning platforms and systems.

## Paper Submission and Publication

- Submissions must be formatted according to the instructions which can be found on the Springer website [.. here ..](#) under "Instructions for Authors".
- Papers must be submitted in PDF format for review purposes, but authors are required to upload editable word-processor files (LaTeX or MS Word) at the end of the review process.
- The required paper length is 7-10 pages in publisher format. Papers longer than this may be subject to an additional charge. Papers much longer or shorter than the required length may be rejected, at the decision of the organisers.
- Papers to be considered for the conference must be submitted in PDF form through the PROSE online submission and review system available [.. here ..](#)

## Session Chairs:

Prof. Mirjana Ivanović, University of Novi Sad, Serbia

Prof. Zoran Budimac, University of Novi Sad, Serbia

Prof. Costin Badica, University of Craiova, Romania

Prof. Lakhmi Jain, University of Canberra, Australia

## Important Dates

- Paper submission: **16 January 2017**
- Acceptance notification: **13 February 2017**
- Final paper submission: **13 March 2017**
- Conference: **21 - 23 June 2017**

## More information

- About KES AMSTA 2017:  
<http://amsta-17.kesinternational.org/>  
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